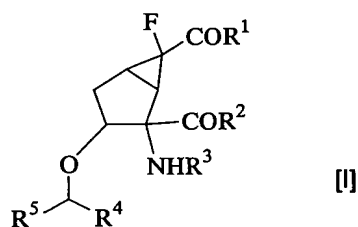


CLAIMS

1. An antidepressant comprising, as an active ingredient, a compound having an antagonistic effect on group II metabotropic glutamate receptors.
2. A 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative of Formula [I]:



[wherein

- 10 R¹ and R², which may be the same or different, each represent a hydroxyl group, a C₁₋₁₀ alkoxy group, a phenoxy group, a naphthyloxy group, a C₁₋₆ alkoxy group which is substituted with one or two phenyl groups, a C₁₋₆ alkoxy-C₁₋₆ alkoxy group, a hydroxy-C₂₋₆ alkoxy group, an amino group,
- 15 an amino group which is substituted with the same or different one or two C₁₋₆ alkyl groups, an amino group which is substituted with the same or different one or two C₁₋₆ alkoxy-C₁₋₆ alkyl groups, an amino group which is substituted with the same or different one or two hydroxy-C₂₋₆ alkyl groups, an amino group which is substituted with the same or different one or two C₁₋₆ alkoxycarbonyl-C₁₋₆ alkyl groups, or a native or non-native amino acid residue represented by NR⁶-CHR⁷-A-CO₂R⁸ (wherein R⁶ and R⁷, which may
- 20

be the same or different, each represent a hydrogen atom, a hydroxy-C₁₋₆ alkyl group, a hydroxycarbonyl-C₁₋₆ alkyl group, a C₁₋₁₀ alkyl group, a phenyl group, a phenyl-C₁₋₆ alkyl group, a hydroxyphenyl group, a hydroxyphenyl-C₁₋₆ alkyl group, a naphthyl group, a naphthyl-C₁₋₆ alkyl group, an aromatic heterocyclic C₁₋₆ alkyl group, a C₁₋₆ alkoxy-C₁₋₆ alkyl group, an amino-C₂₋₆ alkyl group, a guanidino-C₂₋₆ alkyl group, a mercapto-C₂₋₆ alkyl group, a C₁₋₆ alkylthio-C₁₋₆ alkyl group or an aminocarbonyl-C₁₋₆ alkyl group, or R⁶ and R⁷ may together represent a group capable of forming a methylene group, an ethylene group or a propylene group, or may together form a cyclic amino group; R⁸ represents a hydrogen atom or a protecting group for a carboxyl group; and A represents a single bond, a methylene group, an ethylene group or a propylene group);

R³ represents a C₁₋₁₀ acyl group, a C₁₋₆ alkoxy-C₁₋₆ acyl group, a hydroxy-C₂₋₁₀ acyl group, a C₁₋₆ alkoxycarbonyl-C₁₋₆ acyl group, a hydroxycarbonyl-C₁₋₆ acyl group, or an amino acid residue represented by R⁹-NH-A-CHR⁷-CO (wherein R⁷ and A are as defined above, and R⁹ represents a hydrogen atom or a protecting group for an amino group); and

R⁴ and R⁵, which may be the same or different, each represent a hydrogen atom, a C₁₋₁₀ alkyl group, a C₂₋₁₀ alkenyl group, a phenyl group, a naphthyl group, a 5-membered heteroaromatic ring containing one or more heteroatoms, or a phenyl group substituted with 1 to 5 substituents selected from the group consisting of a halogen atom, a C₁₋₁₀ alkyl group, a C₁₋₁₀ alkoxy group, a

trifluoromethyl group, a phenyl group, a hydroxycarbonyl group, an amino group, a nitro group, a cyano group and a phenoxy group, or R⁴ and R⁵ may together form a cyclic structure]

5 or a pharmaceutically acceptable salt or hydrate thereof.

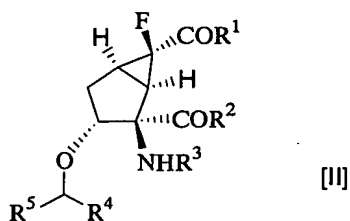
3. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 2, wherein in Formula [I], R¹ and R² are each a hydroxyl group and R³ is a hydrogen atom, or a pharmaceutically
10 acceptable salt or hydrate thereof.

4. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 2, wherein in Formula [I], R¹ is a hydroxyl group and R³ is a hydrogen atom, or a pharmaceutically acceptable salt or
15 hydrate thereof.

5. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 2, wherein in Formula [I], R² is a hydroxyl group and R³ is a hydrogen atom, or a pharmaceutically acceptable salt or
20 hydrate thereof.

6. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 2, wherein in Formula [I], R¹ and R² are each a hydroxyl group, or a pharmaceutically acceptable salt or hydrate thereof.

25 7. A 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative of Formula [II]:



[wherein

R^1 and R^2 , which may be the same or different, each represent a hydroxyl group, a C_{1-10} alkoxy group, a phenoxy group, a naphthyloxy group, a C_{1-6} alkoxy group which is substituted with one or two phenyl groups, a C_{1-6} alkoxy- C_{1-6} alkoxy group, a hydroxy- C_{2-6} alkoxy group, an amino group, an amino group which is substituted with the same or different one or two C_{1-6} alkyl groups, an amino group which is substituted with the same or different one or two C_{1-6} alkoxy- C_{1-6} alkyl groups, an amino group which is substituted with the same or different one or two hydroxy- C_{2-6} alkyl groups, an amino group which is substituted with the same or different one or two C_{1-6} alkoxycarbonyl- C_{1-6} alkyl groups, or a native or non-native amino acid residue represented by $NR^6-CHR^7-A-CO_2R^8$ (wherein R^6 and R^7 , which may be the same or different, each represent a hydrogen atom, a hydroxy- C_{1-6} alkyl group, a hydroxycarbonyl- C_{1-6} alkyl group, a C_{1-10} alkyl group, a phenyl group, a phenyl- C_{1-6} alkyl group, a hydroxyphenyl group, a hydroxyphenyl- C_{1-6} alkyl group, a naphthyl group, a naphthyl- C_{1-6} alkyl group, an aromatic heterocyclic C_{1-6} alkyl group, a C_{1-6} alkoxy- C_{1-6} alkyl group, an amino- C_{2-6} alkyl group, a guanidino- C_{2-6} alkyl group, a mercapto- C_{2-6} alkyl group, a C_{1-6} alkylthio-

C₁₋₆ alkyl group or an aminocarbonyl-C₁₋₆ alkyl group, or R⁶ and R⁷ may together represent a group capable of forming a methylene group, an ethylene group or a propylene group, or may together form a cyclic amino group; R⁸ represents a
5 hydrogen atom or a protecting group for a carboxyl group; and A represents a single bond, a methylene group, an ethylene group or a propylene group);

R³ represents a C₁₋₁₀ acyl group, a C₁₋₆ alkoxy-C₁₋₆ acyl group, a hydroxy-C₂₋₁₀ acyl group, a C₁₋₆ alkoxycarbonyl-C₁₋₆
10 acyl group, a hydroxycarbonyl-C₁₋₆ acyl group, or an amino acid residue represented by R⁹-NH-A-CHR⁷-CO (wherein R⁷ and A are as defined above, and R⁹ represents a hydrogen atom or a protecting group for an amino group); and

R⁴ and R⁵, which may be the same or different, each
15 represent a hydrogen atom, a C₁₋₁₀ alkyl group, a C₂₋₁₀ alkenyl group, a phenyl group, a naphthyl group, a 5-membered heteroaromatic ring containing one or more heteroatoms, or a phenyl group substituted with 1 to 5 substituents selected from the group consisting of a
20 halogen atom, a C₁₋₁₀ alkyl group, a C₁₋₁₀ alkoxy group, a trifluoromethyl group, a phenyl group, a hydroxycarbonyl group, an amino group, a nitro group, a cyano group and a phenoxy group, or R⁴ and R⁵ may together form a cyclic structure]

25 or a pharmaceutically acceptable salt or hydrate thereof.

8. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 7, wherein in Formula [II], R¹ and R² are each a hydroxyl

group and R^3 is a hydrogen atom, or a pharmaceutically acceptable salt or hydrate thereof.

9. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 7,
5 wherein in Formula [II], R^1 is a hydroxyl group and R^3 is a hydrogen atom, or a pharmaceutically acceptable salt or hydrate thereof.

10. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 7,
10 wherein in Formula [II], R^1 is a hydroxyl group, R^3 is a hydrogen atom, and R^2 is a C_{1-10} alkoxy group or a C_{1-6} alkoxy group substituted with one phenyl group, or a pharmaceutically acceptable salt or hydrate thereof.

11. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 7,
15 wherein in Formula [II], R^1 is a hydroxyl group, R^3 is a hydrogen atom, and R^2 is $NH-CHR^7-CO_2H$, or a pharmaceutically acceptable salt or hydrate thereof.

12. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 7,
20 wherein in Formula [II], R^2 is a hydroxyl group and R^3 is a hydrogen atom, or a pharmaceutically acceptable salt or hydrate thereof.

13. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 7,
25 wherein in Formula [II], R^2 is a hydroxyl group, R^3 is a hydrogen atom, and R^1 is a C_{1-10} alkoxy group or a C_{1-6} alkoxy group substituted with one phenyl group, or a

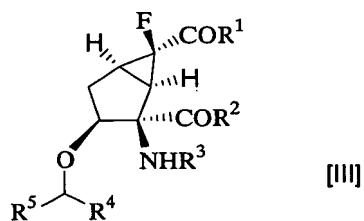
pharmaceutically acceptable salt or hydrate thereof.

14. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 7, wherein in Formula [II], R^2 is a hydroxyl group, R^3 is a hydrogen atom, and R^1 is $NH-CHR^7-CO_2H$, or a pharmaceutically acceptable salt or hydrate thereof.

15. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 7, wherein in Formula [II], R^1 and R^2 are each a hydroxyl group, or a pharmaceutically acceptable salt or hydrate thereof.

16. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 7, wherein in Formula [II], R^1 and R^2 are each a hydroxyl group and R^3 is H_2N-CHR^7-CO , or a pharmaceutically acceptable salt or hydrate thereof.

17. A 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative of Formula [III]:



20 [wherein

R^1 and R^2 , which may be the same or different, each represent a hydroxyl group, a C_{1-10} alkoxy group, a phenoxy group, a naphthyloxy group, a C_{1-6} alkoxy group which is

substituted with one or two phenyl groups, a C₁₋₆ alkoxy-C₁₋₆ alkoxy group, a hydroxy-C₂₋₆ alkoxy group, an amino group, an amino group which is substituted with the same or different one or two C₁₋₆ alkyl groups, an amino group
5 which is substituted with the same or different one or two C₁₋₆ alkoxy-C₁₋₆ alkyl groups, an amino group which is substituted with the same or different one or two hydroxy-C₂₋₆ alkyl groups, an amino group which is substituted with the same or different one or two C₁₋₆ alkoxycarbonyl-C₁₋₆
10 alkyl groups, or a native or non-native amino acid residue represented by NR⁶-CHR⁷-A-CO₂R⁸ (wherein R⁶ and R⁷, which may be the same or different, each represent a hydrogen atom, a hydroxy-C₁₋₆ alkyl group, a hydroxycarbonyl-C₁₋₆ alkyl group, a C₁₋₁₀ alkyl group, a phenyl group, a phenyl-C₁₋₆
15 alkyl group, a hydroxyphenyl group, a hydroxyphenyl-C₁₋₆ alkyl group, a naphthyl group, a naphthyl-C₁₋₆ alkyl group, an aromatic heterocyclic C₁₋₆ alkyl group, a C₁₋₆ alkoxy-C₁₋₆ alkyl group, an amino-C₂₋₆ alkyl group, a guanidino-C₂₋₆ alkyl group, a mercapto-C₂₋₆ alkyl group, a C₁₋₆ alkylthio-
20 C₁₋₆ alkyl group or an aminocarbonyl-C₁₋₆ alkyl group, or R⁶ and R⁷ may together represent a group capable of forming a methylene group, an ethylene group or a propylene group, or may together form a cyclic amino group; R⁸ represents a hydrogen atom or a protecting group for a carboxyl group;
25 and A represents a single bond, a methylene group, an ethylene group or a propylene group);

R³ represents a C₁₋₁₀ acyl group, a C₁₋₆ alkoxy-C₁₋₆ acyl group, a hydroxy-C₂₋₁₀ acyl group, a C₁₋₆ alkoxycarbonyl-C₁₋₆

acyl group, a hydroxycarbonyl-C₁₋₆ acyl group, or an amino acid residue represented by R⁹-NH-A-CHR⁷-CO (wherein R⁷ and A are as defined above, and R⁹ represents a hydrogen atom or a protecting group for an amino group); and

5 R⁴ and R⁵, which may be the same or different, each represent a hydrogen atom, a C₁₋₁₀ alkyl group, a C₂₋₁₀ alkenyl group, a phenyl group, a naphthyl group, a 5-membered heteroaromatic ring containing one or more heteroatoms, or a phenyl group substituted with 1 to 5
10 substituents selected from the group consisting of a halogen atom, a C₁₋₁₀ alkyl group, a C₁₋₁₀ alkoxy group, a trifluoromethyl group, a phenyl group, a hydroxycarbonyl group, an amino group, a nitro group, a cyano group and a phenoxy group, or R⁴ and R⁵ may together form a cyclic
15 structure]

or a pharmaceutically acceptable salt or hydrate thereof.

18. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 17, wherein in Formula [III], R¹ and R² are each a hydroxyl
20 group and R³ is a hydrogen atom, or a pharmaceutically acceptable salt or hydrate thereof.

19. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 17, wherein in Formula [III], R¹ is a hydroxyl group and R³ is
25 a hydrogen atom, or a pharmaceutically acceptable salt or hydrate thereof.

20. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 17,

wherein in Formula [III], R^1 is a hydroxyl group, R^3 is a hydrogen atom, and R^2 is a C_{1-10} alkoxy group or a C_{1-6} alkoxy group substituted with one phenyl group, or a pharmaceutically acceptable salt or hydrate thereof.

5 21. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 17, wherein in Formula [III], R^1 is a hydroxyl group, R^3 is a hydrogen atom, and R^2 is $NH-CHR^7-CO_2H$, or a pharmaceutically acceptable salt or hydrate thereof.

10 22. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 17, wherein in Formula [III], R^2 is a hydroxyl group and R^3 is a hydrogen atom, or a pharmaceutically acceptable salt or hydrate thereof.

15 23. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 17, wherein in Formula [III], R^2 is a hydroxyl group, R^3 is a hydrogen atom, and R^1 is a C_{1-10} alkoxy group or a C_{1-6} alkoxy group substituted with one phenyl group, or a
20 pharmaceutically acceptable salt or hydrate thereof.

24. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 17, wherein in Formula [III], R^2 is a hydroxyl group, R^3 is a hydrogen atom, and R^1 is $HN-CHR^7-CO_2H$, or a
25 pharmaceutically acceptable salt or hydrate thereof.

25. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 17, wherein in Formula [III], R^1 and R^2 are each a hydroxyl

group, or a pharmaceutically acceptable salt or hydrate thereof.

26. The 2-amino-3-alkoxy-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivative according to claim 17,
5 wherein in Formula [III], R^1 and R^2 are each a hydroxyl group and R^3 is NH_2-CHR^7-CO , or a pharmaceutically acceptable salt or hydrate thereof.

27. A pharmaceutical preparation comprising one or more pharmaceutically acceptable carriers, excipients or
10 diluents and the compound according to any one of claims 2 to 26.

28. A drug comprising the compound according to any one of claims 2 to 26 as an active ingredient.

29. The drug according to claim 28, which is an
15 antagonist of group II metabotropic glutamate receptors.

30. The use of the compound according to any one of claims 2 to 26 as a drug.